

CLAIMS

Please amend claims 10-16 and 19-21. Please add new claim 22. No new matter has been added.

1. (Previously Presented) An apparatus, comprising:
an array of carbon nanotube heads, each of the carbon nanotube heads including:
a carbon nanotube,
a housing surrounding the carbon nanotube,
an acceleration electrode mounted at an end of the housing,
a deflection electrode interposed between the acceleration electrode and the carbon nanotube,
a window sealing the end of the housing,
and
a detection electrode mounted on a surface of the window, the surface exterior to the housing;
and
a substrate upon which the array of carbon nanotube heads are mounted.
2. (Original) The apparatus of claim 1, wherein:
the array of carbon nanotube heads includes a set of read/write heads.
3. (Original) The apparatus of claim 1, wherein:
the array of carbon nanotube heads includes independent controls for each carbon nanotube head.
- 4-9. (Cancelled)

10. (Currently Amended) The apparatus of claim 1, further comprising:

~~A~~ a gating electrode interposed between the deflection electrode and the carbon nanotube.

11. (Currently Amended) The apparatus of claim 1 ~~10~~, further comprising:

~~A~~ a focus electrode interposed between the deflection electrode and the carbon nanotube ~~gating~~
~~electrode~~.

12. (Currently Amended) The apparatus of claim 1, wherein:

~~The~~ the housing is a vacuum housing.

13. (Currently Amended) The apparatus of claim 1, wherein:

~~The~~ the window is a boron nitride window.

14. (Currently Amended) The apparatus of claim 1, wherein:

~~The~~ the substrate is mounted on a base, the housing of each carbon nanotube is attached to the
base.

15. (Currently Amended) The apparatus of claim 1, wherein:

~~Carbon~~ carbon nanotubes of the array of carbon nanotubes each have individual housings
associated therewith.

16. (Currently Amended) The apparatus of claim 1, wherein:

~~Carbon~~ carbon nanotubes of the array of carbon nanotubes share a single housing among all
carbon nanotubes of the array of carbon nanotubes.

17. (Previously Presented) An apparatus, comprising:

an array of carbon nanotube heads, each of the carbon nanotube heads including:

a carbon nanotube,

an evacuated housing surrounding the carbon nanotube,

an acceleration electrode mounted at an end of the housing,

a deflection electrode interposed between the acceleration electrode and the carbon nanotube,

a boron nitride window sealing the end of the housing,

a detection electrode mounted on a surface of the window, the surface exterior to the housing

a gating electrode interposed between the deflection electrode and the carbon nanotube,

and

a focus electrode interposed between the deflection electrode and the gating electrode;

and

a substrate upon which the array of carbon nanotube heads are mounted.

18. (Previously Presented) An apparatus, comprising:

an array of carbon nanotube heads, each of the carbon nanotube heads including:

a carbon nanotube,

a housing surrounding the carbon nanotube,

an acceleration electrode mounted at an end of the housing,

a deflection electrode interposed between the acceleration electrode and the carbon nanotube,

a window sealing the end of the housing,

a detection electrode mounted on a surface of the window, the surface exterior to the housing

a gating electrode interposed between the deflection electrode and the carbon nanotube,

and

a focus electrode interposed between the deflection electrode and the gating electrode;

and

a substrate upon which the array of carbon nanotube heads are mounted.

19. (Currently Amended) The apparatus of claim 18, wherein:

~~The~~ the housing is a vacuum housing.

20. (Currently Amended) The apparatus of claim 18, wherein:

~~The~~ the window is a boron nitride window.

21. (Currently Amended) The apparatus of claim 18, wherein:

~~The~~ the substrate is mounted on a base, the housing of each carbon nanotube is attached to the base.

22. (New) The apparatus of claim 17, wherein:

the substrate is mounted on a base, the housing of each carbon nanotube is attached to the base.